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GLOSSITIS.

IN the Number of the Cyclopædia of Practical Medicine for September last, is a short article on Glossitis, which we shall notice. Passing over some general considerations, of no value, we are presented with the following description of the invasion of the disease.

'Idiopathic inflammation of the tongue, or glossitis, is a very rare disease, and very formidable in itself, as well as in reference to its influence on the functions of respiration and deglutition, both of which are in general materially impeded by its presence; the former so much so as to endanger life. It commences with the usual constitutional symptoms common to inflammatory diseases, accompanied with some uneasiness of deglutition; the tongue is rendered painful, and the patient sensible of its enlargement, which is evident on inspection: its surface, at first very red, soon becomes coated, except at the tip and lateral margins, with viscid whitish mucus; the articulation is indistinct, and any attempt to remove the organ, or pressure upon it, increases pain: the saliva appears to be profusely secreted, but the inability and disinclination of the patient to remove it from the mouth, accounts in a great measure for the accumulation and dribbling which are always going on. The local pain increases with the progress of the swelling, which is very rapid; speech and the natural motions of the tongue are consequently more and more difficultly performed; and the augmented bulk, encroaching posteriorly on the space assigned to the passage of air and nutriment, increases the difficulties of respiration and deglutition. The pressure also is a source of irritation to the larynx, and occasions a cough, which under the circumstances of the disease is peculiarly harassing; and the cavity of the mouth being too small to contain the tongue in its increased volume, the organ is consequently protruded. In this state it is obvious that a mechanical impediment must exist to the free course of the blood to and from the head; and from this cause there takes place a throbbing of the arteries, an undulatory motion in the jugular veins, lividity of the complexion, an unnatural prominence of the eyeballs, altogether occasioning an appearance of fulness of the face similar to that consequent to strangulation from any other cause. The accompanying sensations are pain of head, and generally in the ears, vertigo, sometimes indistinct visions, and confusion of mind, or even delirium; considerable pain is also often experienced in the tract of the spinal cord and parts adjacent, from the cervix downwards.'

The constitutional symptoms correspond with the progress of the complaint, being those of acute local inflammation in the first instance, and afterwards partaking of the united characters of irritability and exhaustion.

Sometimes the inflammation is confined to one half of the tongue, the raphe bounding it. The constitutional symptoms are then milder, and they are also modified, of course, by the circumstances of age, sex, &c. Glossitis terminates in resolution, suppuration, &c. like all other inflammations. When the inflammation of the mucous membrane has been excessive, an expansion of lymph has been formed, as in croup. A case of this kind has been recorded by Frank, who refers to a preparation of a similar result of glossitis in the museum of Hunter. The period during which glossitis continues will, of course, vary, but resolution seldom takes place before the fifth or sixth day. The local and general symptoms progressively pass away. The following case is transcribed by Mr. Kerr, the writer of the article from Frank.

Case.—‘A healthy youth, nineteen years of age, was suddenly attacked with febrile symptoms; together with pain in the head and throat, difficulty of deglutition and cough: these having been neglected, increased, and during the night he experienced very acute pain at the end of his tongue, increasing in extent and severity with its progressive swelling, which was rapid and considerable, filling the whole cavity of the mouth, and rendering him unable to articulate. The following day he complained of pain in the head, especially towards the forehead, with increase of sensibility of the eye to the impression of light; the tongue was remarkable for its red color, increase of size, rigidity and heat; the patient could neither draw it inwards nor extend it; the sublingual glands and tonsils were tumefied; he was incapable of speech and deglutition; complained of great thirst, had a dry burning skin, and a frequent strong pulse. Copious perspiration of a sour odor came on in the night, the swelling of the tongue and tonsils subsided, and with it the febrile symptoms; the tongue became moist, deglutition easy, and the following day restoration to health seemed to be established.’

Suppuration is attended with the usual constitutional symptoms attending that termination of inflammation. If the pus is deeply imbedded in the substance of the organ, no relief takes place; because, there being little cellular membrane, the included pus exercises much pressure, and is not diffused. In this, as in subfacial suppuration, no time should be lost in giving exit to the matter. Gangrene is a very rare consequence of glossitis, and has only happened in very debilitated constitutions. It has been observed that the separation of the mortified from the living parts is particularly rapid.

‘Idiopathic glossitis must at all times be considered a very formidable disease, and the degree of danger, in a previously healthy subject, will be proportionate to the obstacle which the tumefied organ may present to respiration, and to the opportunity which may be offered of subduing the inflammation on which it depends. From active treatment in the early stage, a favorable issue may reasonably be anticipated, particularly if a mitigation of symptoms is seen to follow the successive application of remedial means; but if the disease be neglected in the early stage, or the volume of the tongue increase, in resistance to the measures resorted to, respiration will be performed with proportionably greater difficulty, threatening extreme danger to life by suffocation; and in persons predis-

posed to apoplexy, or other cerebral disease, in an additional degree, by the impediment occasioned to the free return of blood from the head, and the consequent aggravation of these diseases. Diminution in the volume of the tongue, whether by artificial means directly applied, or through the medium of the system, will proportionately subtract from the danger, and increase the rational hopes of recovery; but if the inflammation should have proceeded to gangrene, the danger to life will be influenced by the probability presented by constitutional circumstances of arresting its progress, and, when effected, by the extent of the mortified part. The tongue being the organ of taste, and necessary to the perfection of speech, of mastication, and of deglutition, these functions will be affected commensurately with the local destruction.*

With respect to treatment, we need scarcely say that it should be actively antiphlogistic in principle, and we leave it to the practitioner to supply the detail; his judgment must seize, combine, or separate general and local bleeding—purgatives and stimulating enemata—diaphoretics—pediluvia, &c. After leeching, a piece of ice in the mouth is recommended—as is a blister early applied round the throat. But there is a powerful means of relief yet unmentioned; we allude to free and deep scarifications, made from the base to the apex of the tongue, but clear of the ranine arteries.

† Several instances of the advantage of incisions in extreme enlargements of the tongue have been transmitted to us by M. de la Malle.* Camerarius has recorded a case in which the patient was rescued from impending death by this operation; and Zacutus Lusitanus, another of a child, ten years of age, where the usual remedies had failed of affording relief, and the symptoms yielded to deep scarifications. Job a Meckoen, a Dutch surgeon, who lived in the seventeenth century,† adopted this practice on several occasions with the most complete success; and it is probable, as Mr. Samuel Cooper has remarked, that a fatal issue from suffocation, consequent to various kinds of enlargement of the tongue, might in many instances have been averted by its timely adoption. In the twenty-eighth volume of the *Edinburgh Medical and Surgical Journal*, page 77, an interesting case of the disease is recorded, in which the free use of the scalpel was attended with the best effects; allowing an exit for puriform matter. In the twenty-first volume of the same work, page 135, there is another case, illustrative of the advantage of incisions of the tongue, in a case of its inflammation, apparently consequent to suppression of the menstrual discharge from exposure to cold.

Incisions, however, have failed. A case in which they did so occurred at the Winchester Hospital, and is related in the *Lancet*, Vol. II. for 1827. When incisions fail, bronchotomy yet offers a chance of life. A successful case of this description is recorded by Mr. Benjamin Bell. Mr. Kerr observes that Dessault would have preferred the introduction of an elastic gum catheter from the nose into the trachea. We conceive that, were this actually necessary, it would be objectionable on account of the extreme irritability of the parts. It might be tried. When suppuration has occurred, the pus should be freely let out with a lancet or

* *Mem. de l'Acad. de Chirurgie*, vol. v.
† *Dict. des Sciences Med. Art. Glossite*.

scalpel. A deep incision may be sometimes necessary. In a case reported in the Glasgow Journal, by Mr. Orgill, two incisions, half an inch deep, were made, from as far back as the scalpel could be made to reach to the tip of the tongue. In the evening still deeper scarifications were made, and on the next day, the tip of the tongue being livid, an incision an inch deep was made with a scalpel, and a gush of matter took place. In eight days the patient was well.

After the evacuation of the pus, Mr. Kerr recommends the employment of merely a gargle of honey and barley-water, though it may sometimes be necessary to resort to astringents and detergents.

Medico-Chirurgical Review.

REMARKS ON THE NEUTRAL MIXTURE.

BY JOSEPH SCATTERGOOD.

No reader of this Journal, I presume, will question the great importance of uniformity in the strength of all our medicinal preparations, and that the physician who disregards this very essential point in the articles he may administer, will be continually liable to disappointments and inexplicable difficulties.

The great celebrity of the diaphoretic preparation called neutral mixture, and, consequently, the frequent applications apothecaries have for it, renders it highly important to the success of the physician, as well as the character and convenience of the apothecary, that a formula should be agreed upon, which would render it, what all admit it is not now, of uniform strength.

I trust that no improper motive will be attributed to me if I attempt to show that this popular and highly useful article is daily prescribed by our physicians, of a diversity of strength they are not perhaps aware of—in order to do which, it will only be necessary to copy a few of the principal formulæ that most are daily compounded. The four following are those generally used :—

No. 1.—R. Succ. Limonis Recentis ʒij.
Potassæ Carbonatis q. s. ad. saturand.
Sacch. alb. ʒij.
Aqum ʒij.

No. 2.—R. Succ. Limonis Recentis ʒiv.
Potassæ Carbonatis q. s. ad. saturand.

No. 3.—The juice of two Lemons.
Potassæ Carbonatis q. s. ad. saturand.
Sacch. alb. ʒij.
Aqum ʒij.

No. 4.—Potassæ Carbonatis ʒiss.
Succ. Limon q. s.
Sacch. alb. ʒss.
Aqum from 4 to 6 oz.

The above are given in the same doses, although they all vary in strength. The second is double that of the first; the strength of the third will depend entirely on the quantity of the juice yielded by the lemons, the product of which is very uncertain, some yielding an ounce and a half, others not more than half an ounce, according to their size, age, &c. The fourth, independent of containing two or three times as

much water as any of the rest, will be liable, in common with all the others, to vary with the strength of the juice, in which a difference of upwards of 20 per cent. is often observed. This *peculiarity* of the juice will always render its employment objectionable, when uniformity of strength is regarded. The resulting compound of all these formulæ is a nitrate of potassa, more or less diluted and mixed with the coagulable mucilaginous matter of the lemon juice, to get rid of which is always attended with more or less difficulty and inconvenience.

It would be considered strange indeed, at the present day, if a physician should order the apothecary to saturate a given quantity of dilute sulphuric acid with magnesia, whenever he wished to administer a dose of Epsom salts; and yet the practice of making the neutral mixture extemporaneously, is not less unscientific and useless. The citrate of potassa, when crystallized, is as definite a compound as sulphate of magnesia or any other salt, and as such should certainly be used for preparing mixtures, of which it is a main constituent. Fifty grains of citrate of potassa, dissolved in one ounce of water, will be found to be about equal to one ounce of lemon juice (of average strength), saturated with potassa, and hence a preparation as follows may be substituted in all cases where the neutral mixture prepared with fresh lemon juice is admissible; and has the advantage over it of being *uniform* in strength, clear of *inert* matter, and readily made at any time, while it is equally agreeable to the taste.*

R. Potassæ Citræ ʒv.

Loaf sugar, previously rubbed on fresh lemon peel, or with a drop or two of oil of lemon on it, ʒss.

Water ʒvj.

If, however, notwithstanding the above considerations, this mixture is still to be extemporaneously prepared, crystallized citric acid is certainly the only thing the accurate scientific physician should employ. It is uniform in strength, is very soluble in water, and of an agreeable taste. The following formula (substituting the bi-carbonate† for carbonate of potassæ, and adding a little sugar), given in the U. S. Dispensatory, is a good one, and will be found to make a much more satisfactory mixture, in every respect, than any prepared with lemon juice:—

Citric acid ʒij.

Ol. limon m. i.

Potassæ bi-carb. q. s. ad saturand.

Aquæ ʒiv.

A more agreeable though rather more troublesome mode of administering the ingredients of the neutral mixture, is to dissolve them separately, so that they may be mixed at the bed-side and drank during effervescence. This constitutes the well-known preparation commonly called the effervescing draught. For the formation of this draught the following powders will be found a certain and convenient mode; they may be carried with more convenience, and will be found altogether more manageable than the liquids necessary to form it, particularly where

* A few grains of citric acid, say 10 grains to the quantity ordered above, would render it still more agreeable to many palates.

† The common salt of tartar of commerce being the only carbonate of potash generally kept in the shops, and containing impurities, the bi-carbonate is therefore preferred.

lemon juice is used, this being often so weak as scarcely to decompose the carbonate of potassæ. They may be kept put up as the sodaic and seidlitz powders are, with directions for their use—the acid in white, and the bi-carbonate of potassæ and sugar in blue paper :—

Powdered citric acid ℞i.

Bi-carb. potassæ 3ss.

Sugar, previously rubbed on lemon peel, or scented with ol. lemon 3ss.

Journal of Pharmacy.

CASES OF CHOLERA.

[Communicated for the Boston Medical and Surgical Journal.]

BY CHARLES HOOKER, M.D. NEW HAVEN, CONN.

FROM July 9th to September 1st 1832, ten cases of cholera came under my care, besides one case attended in consultation with Dr. T. P. Beers, and one with Dr. L. Keep. Of these twelve cases, 6 died and 6 recovered. From September 1st to October 25th, I attended twenty-one cases, including one case attended with Dr. Beers, and one with Dr. J. T. Denison. Of these 21 cases, 2 died and 19 recovered.

All of these cases were unequivocal and severe. Numerous other mild, though unequivocal, cases were prescribed for, particularly in the families in which the severe cases occurred. In nearly all of the severe cases I had the advice of Dr. Denison, and in several of them that of Dr. Beers, Dr. J. Knight, Dr. Thomas Miner of Middletown, the lamented Dr. Heerimann, and other physicians.

In the first twelve cases the treatment was varied. The principal remedies were opium in frequent and pretty large doses, calomel in frequent small doses, stimulants, acrid irritants, and external irritants and heat.

In the twenty-one cases, subsequent to September 1st, the treatment was pretty uniform—consisting of *calomel* in very large and frequent doses, *camphor* in frequent small doses, *ice* frequently administered, and *external heat and irritants*. The first dose of calomel was from 20 to 60 grains, and the subsequent doses from 8 to 20 grains, repeated every hour, or every second or fourth hour—the amount and frequency of the doses being proportioned to the severity of the symptoms. From 6 to 12 drops of tinct. camphor (U. S. Pharmacopœia) were administered, in a teaspoonfull of cold water, every 5, 10 or 15 minutes. Ice was given ad libitum—in most cases a piece, the size of a large filbert, every 5, 10 or 15 minutes. The calomel was given in the form of a *dry powder*—being applied to the upper surface of the root of the tongue, and followed with a piece of ice, or a teaspoonfull of cold water.

The ordinary result of this medication was a suppression of the vomiting and purging, and, as observed by applying the ear or the stethoscope to the abdomen, a *complete cessation of peristaltic motion*. The calomel was evidently the most efficient agent in producing this result, for in two cases, in which neither camphor nor ice was administered, the large doses of calomel alone were followed with this cessation of the peristaltic murmur. The camphor obviously contributed to allay the morbid irritation of the stomach and intestines, and thus to check the evacuations :—it probably also had a favorable operation (which it cer-

tainly has in some other diseases attended with a deficiency of nervous influence) in increasing the frequency and fullness of the respiration, and thus promoting the arterialization of the blood, and obviating the tendency to coma. The administration of ice, when the skin and the tongue have almost an icy coldness, seems at first view preposterous. In fact, however, it proved grateful to the patient, relieved the burning sensation in the epigastrium, appeared to equalize excitement in the system, and did not diminish the force of arterial action.

The fact that large doses of medicines will frequently overcome diseased action, and restore healthy action, when small doses of the same medicines will even increase the diseased action, has been frequently noticed by practitioners and authors. Mr. Corbyn, of the Bengal Establishment, in his late 'Treatise on the Epidemic Cholera,' has noticed this regarding the operation of opium and calomel. He remarks that 'calomel, in doses of from fifteen to twenty grains, is a sedative, and has the singular good qualities of immediately stopping violent vomiting and purging, removing spasmodic irritability, producing tranquillity of mind, exciting the secretion of the liver, and preventing the process of inflammation. I have known a patient, laboring under frequent dysenteric evacuations, with tenesmus, to be under the common course of small doses of calomel and opium for a fortnight without effect, and, strange to say, one dose of twenty grains of calomel at once stopped the purging, removed the tenesmus, and soon restored the bowels to their former tone. Calomel, in doses of from one to five and ten grains, acts as a stimulant [irritant], produces vomiting and violent purging,' &c. (*Med. Chir. Rev.* Jan. 1833, p. 65.) These comparative effects of large and small doses of calomel were strikingly exemplified in our cases of cholera. In the first cases, when frequent small doses were administered, the peculiar loud rattling borborygmi, so characteristic of this disease, continued unabated, and the evacuations seemed, for a while at least, increased. On the contrary, one very large dose of calomel seemed at once to overcome the irritative action—the vomiting, purging and borborygmi ceased, and a perfect stillness in the abdomen ensued. This cessation of peristaltic action commonly continued six, eight, or twelve hours after the administration of the first dose of calomel; when the stethoscope could detect a returning healthy peristaltic murmur, which, continuing to increase, was succeeded within a few hours by several grass-green or 'spinage-colored' evacuations, and the patient convalesced. In some cases vomiting occurred within a few minutes after the administration of the first dose of calomel, requiring a repetition of the dose; after which the calomel, camphor and ice were commonly retained without difficulty.

Of the 21 patients treated on this plan, 15 retained each more than 150 grains of calomel, within the first thirty-six hours after medication was commenced. Several cases were followed with a slight soreness of the gums, but in no case was there severe pytalism. In no case was this treatment followed by excessive catharsis—indeed, in most cases, after the cessation of peristaltic murmur had continued six or eight hours, other remedies were administered to aid the cathartic operation of the calomel.

Most writers divide this disease into several stages, and recom-

mend a particular plan of treatment for each stage. It is, however, not easy to distinctly define these several stages—the term *collapse* is usually applied to a state of general prostration or exhaustion ; but it is difficult to define the precise degree of prostration at which the collapse may be considered as commencing. In the severe cases our treatment was nearly the same, in whatever stage of the disease we were called. Several of our patients would unquestionably be considered as in a state of extreme collapse—lying for hours pulseless at the wrist, and with a general icy coldness of the tongue and the extremities. In some of these cases very moderate quantities of stimulants and acrid irritants—opium, brandy, capsicum, &c. were administered : these remedies, however, were not considered an important part of the medication, and in some of the severest cases were not used at all. In this particular, experience compelled me to renounce my preconceived opinions—opinions which were formed from the history of the disease in foreign countries, and confirmed by my observation of cases in the New York Hospitals, and which governed my practice in the first cases that came under my care.

One patient, a man about 40 years of age, intemperate, and of a broken down constitution, I found in a state of extreme collapse. He had had a diarrhoea for about five days, and during the last twelve hours the rice-water dejections were as frequent as every 20 minutes—vomiting frequent—spasms severe for the last four hours—countenance ghastly—tongue extremely cold—skin cold and livid—extremities shriveled—the characteristic faint hollow voice, and sighing moan—the pulse alternately imperceptible, and then feebly beating 150 or 160 in the minute. Sixty grains of dry calomel were immediately given, followed by two or three teaspoonfulls of cold water.* Within about fifteen minutes the patient vomited, rejecting a part of the calomel, when another dose of fifteen grains was promptly administered. Eight drops of alcoholic tincture of camphor were given in a teaspoonfull of iced water every ten minutes. A piece of ice, the size of a large filbert, was given every 5, 10 or 15 minutes, ad libitum. As in most other cases similarly treated, within twenty minutes from the administration of the first dose of calomel there was a complete cessation of the vomiting and purging, and of all peristaltic murmur. Admitting that only one half of the first dose of calomel was retained (and it appeared evident that in fact scarcely one quarter was rejected in vomiting), this patient retained 173 grains of calomel within the first twelve hours ; and within the first thirty-six hours, 216 grains. This appearing insufficient to effect a cathartic operation, the following cathartics were successively administered—Tinct. of Rhubarb 3j. ; Elix. Salutis 3j. ; Castor Oil 3j. ; Croton Oil gutt. ij. ; Calcined Magnesia 3ij. ; and 8 Seidlitz Powders—together with frequent enemata. The whole produced a moderate cathartic operation—the dejections having the ordinary grass-green appearance. The convalescence was rapid, during which a very slight soreness of the gums appeared, in consequence of the calomel.

* I am particular to mention the moderate quantity of drink, allowed while there was a tendency to vomiting—for in several cases serious harm was done by large draughts, which had the effect of exciting vomiting and thus rejecting the medicines.

Another patient, attended by Dr. Denison and myself, a girl about sixteen years old, lay more than eight hours with no pulse at the wrist, and with the other ordinary symptoms of extreme collapse. A similar course of medication was followed with the same favorable results.

Of the two fatal cases, which occurred subsequent to the first of September, one was that of a very intemperate man, about 35 years old, whom I found in a low state of collapse. From the first, the case appeared very unpromising; and, owing to the extreme obstinacy of the patient, no regular course of medication could be adopted. He died about three hours after I first saw him.

The other was that of a girl, ten years old, who, without any premonitory symptoms, was instantaneously attacked with severe vomiting, purging and spasms. Soon after the administration of remedies, the vomiting, purging and peristaltic murmur ceased; but the pulse failed, coma supervened, and the patient died within five hours from the attack.

New-Haven, Ct. July 16th, 1833.

PURPURA HEMORRHAGICA.

READ BEFORE THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT.

BY W. CHANNING, M.D.

[Communicated for the Boston Medical and Surgical Journal.]

I HAVE been informed by the Secretary that by a late vote of the Society it has become my duty to make, this evening, a written communication on some subject connected with medicine. I comply with this duty with pleasure. * * * *

A variety of subjects presented themselves to me, when looking round for a topic for this paper, and I have selected from them a disease which is not of very frequent occurrence, and of which the following sketch may not be wholly without interest. This disease is *Purpura*.

Willan placed *Purpura* among the *Exanthemata*, and describes five species. Other writers have taken it out of this class, as it wants one of its elements, viz. fever, and as it is also destitute of the leading symptoms of inflammation, which also characterize that class. *Purpura* has been defined 'an eruption characterized by patches, sometimes of a vivid red, sometimes of a livid hue, the extent of which is sometimes only a line, and at others of several inches, preserving their color under pressure, usually to be found on the skin only, but also existing in some cases on the mucous membrane, in which case there are often hemorrhages.' This definition applies to the disease as presented in the varieties above referred to, especially the latter clause. In one variety, hemorrhagica, all the textures have been found invaded by it; even the serous and muscular tissues have not always escaped. I shall speak principally of *Purpura Hemorrhagica*.

The eruption in this species presents much variety. I have seen it very extensive, especially in the lower portions of the lower extremities. The skin here is almost everywhere covered with spots. Still they are distinct. Sometimes they are quite small, at others larger, not

however amounting to patches. I have met with them in one instance of the latter description elevated above the skin, and rounded, containing blood, which the thinness of the cuticle allowed to be readily effused by very slight violence or mere friction. It has in other instances appeared in large purple patches with an irregular outline, having shades of yellow and green, and so exactly resembling severe bruises as to be taken for them. In one of these cases, a child about 4 years of age, the mother could only account for the appearance by believing that her child had been severely and cruelly beaten at the infant school at which she had placed her. She brought her to me to be confirmed in this notion. The patches were very remarkable on the face of this child, a situation in which I had never before seen them, and where they very rarely occur. They were also noticed on the hairy scalp. I inquired into the state of the child's health. This seemed to be quite good, and so it turned out. The dejections were however bloody, copious, and more frequent than natural. The case was clear enough, and I could not but be surprised at the strength manifested by this child, suffering as it did a serious disease, certainly not in its slightest form.

In another case, the patches were quite solitary, and unusually few in number. There was a large one on the left hip, one on the left arm, one on the right, and not more than two or three elsewhere. I was called to see this patient, a girl about 15 years old, on account of the appearance of these large livid patches, which the mother thought were local mortification, and threatening great danger. This patient had a most bloodless aspect. The face, lips, gums, tongue, and skin except where diseased, were deadly pale. I soon discovered the cause of all this, and at the same time the true nature of the disease. She had suffered excessive uterine hemorrhage for three weeks, the catamenial period so called having lasted all this time, no alarm being excited until the appearance of the purpura. In this case life seemed obviously threatened, but the patient after a time recovered. It was many days however after the hemorrhage had ceased, and the eruption had disappeared, before this patient could be taken out of bed. It is the only case I have seen in which the blood came from the vagina. Similar cases are on record.

I have met with but two cases in which the gums have been noticeably diseased. The mouth in one of these cases was much affected; the eruption was confined to the legs and inside of the mouth, and there was no active hemorrhage from any portion of the mucous tissue. This was a female aged 40, very poor, and having been better off she suffered great mental anxiety and depression from change in her circumstances. She had long been in feeble health. Her first severe symptoms were distress and pain in the right side and epigastric region, with long and most distressing paroxysms of vomiting. She gradually got better. But after some months, the lower extremities were attacked with pain; then the side and epigastrium, as before. While taking pills of Butternut, her mouth became excessively sore, the gums spongy, livid, breath intolerably fetid. These symptoms subsided, but after a few weeks pain again attacked the legs, and true patches of purpura appeared. This patient after a long period of illness recovered something like health. I will not detain the Society by an enumeration of the many symptoms that occurred in this case.

One of the most distressing cases of this disease I have seen, and one more strikingly marked by characteristic symptoms than perhaps any other, was that of a girl aged about 18. In no one has the whole system been so much affected. She got her feet wet May 4, 1829, at what should have been the catamenial period. This was followed on the same day by pain in the left knee, and soon by the ordinary symptoms of acute rheumatism. For this she was treated till the 18th, when I saw her. She had now painful and bloody discharges from the rectum, very offensive breath, great pain in the extremities and bowels, difficult breathing, profuse sweats, heavily loaded tongue, pulse 120. I desired to see the legs. They were found covered with the true eruption of purpura.

This case was under treatment more than two months. In this time many changes occurred. Thus, the eruption extended to the hips, and there hemorrhage took place, then slight ulcerations. The mouth was at times sore, gums swelled and livid, at times the pain would be most severe in one shoulder—now the bowels would seem to recover, and then hemorrhage would again take place. The pulse was always very rapid, and the whole aspect truly morbid. When the tongue cleaned, it would be found denuded, dry, glossy, and then a new coat would form.

The changes the eruption underwent were quite striking; at one time nearly disappearing, with general marks of amendment, and then appearing again with general relapse into former state.

This patient recovered under the ordinary treatment of purpura hemorrhagica, when accompanied with great debility. Till the eruption was discovered, she had been treated for rheumatic fever.—I may remark here, that pains in the extremities, especially in those which are the seats of the complaint, has been a very constant and severe symptom of the cases which have fallen under my notice.

In another case, a girl about 12, the eruption was mistaken for mortification. Her strength and general health were good. She came six miles to see me. Hemorrhage from the bowels existed in this case, and the gums were swollen. The diagnosis and treatment were soon settled, and the patient in no long time was well.

Another case was a boy 17 years old. Had a similar attack several years before this year, 1828. General health good. Eruption at first confined to legs, ankles and feet. It bleeds easily; sores are left, which after a time scab, dry and do well. Present disease two days standing. The eruption suddenly changes place, or appears in new and distant ones; sometimes about epigastrium, accompanied with deranged stomach—sometimes on arms, with pain in them. I first saw this lad June 7th, 1828. On the 20th he was well; at least no symptom of his disease remained.

This patient was soon again attacked as before. I saw him July 17th. The eruption had been preceded by severe stomach symptoms, probably produced by errors in diet. He soon mended, when on the 25th, having committed much imprudence while in warm bath, he was seized with severe inflammatory symptoms, affecting mostly head, neck and chest. Very active treatment was used, and by the 30th his skin was nearly well. A new crop of eruption came out that day, on the legs. It was of the same character as in the first attack in which I saw him. It faded

in legs, and then appeared in arms. By the 7th of August the legs were well, and arms much better. On the 13th the eruption had all disappeared, and with it all other marks of disease.

Such is a rapid sketch of some of the cases of the disease, as it has been presented to me, and these show how various are its forms, or the circumstances under which it may appear. I have but little to say about its remote causes. Its nearest cause 'has been attributed to a want of tone in the extremities of the vessels, thus permitting the blood to escape on the cutaneous surface or mucous system.' The blood would seem to undergo changes which may favor this escape. At least it has been found in a state of remarkable fluidity after death. Dissection has discovered the disease in almost every tissue, and effusions of blood in every organ of the body.

Diagnosis.—Purpura may be confounded with syphilis. The previous history will settle this point. Also with scurvy, and the diagnosis is not so easily made out. I have known the disease in the mouth confounded with mercurial pyralis; and one patient, it was before remarked, was for many days treated for rheumatism without a suspicion of purpura, the bloody stools being ascribed to the remedies employed for the mistaken disease, *colchicum autumnale*. In one case, I have shown that it was ascribed to external violence. Now I think these facts deserve to be remembered, especially the three latter. They are not mentioned in the diagnosis by writers on the disease. A very striking symptom being an external one, the eruption, it can only be discovered by inspection. This should never be neglected when a case presents the other concomitant phenomena of purpura.

Purpura ranks among generally serious and often mortal maladies, and we are advised in it to give a cautious prognosis. I have never known it fatal, but I do not hence consider the caution misplaced.

Treatment.—We are in this to have much regard to the history of the case, and to the most pressing symptom in all grave cases, the hemorrhage. In the very young, and the old and exhausted, a judicious tonic course has its advisers. In the child I referred to, I trusted to purgatives. I know of no remedies which have answered a better purpose than purgatives. Some praise jalap, castor oil, calomel, and *sp. ter.* in large doses. I have preferred saline cathartics, acidulated with dilute *sulp. acid*; and when I would relieve distress in the bowels, and diminish stools, especially bloody ones, I have found nothing better than

Tr. Opii gtt. xxv. *vel* xx.
Acid. Nit. dilut. gtt. xx. *vel* xv.
Mist. Camph. oz. i. M.

In the case with uterine hemorrhage, the greatest benefit seemed to be derived from ice applied to the external organs and the vagina. In fact, internal astringents did little or no good, as far as I could judge. I should have used the *tampon*, if the ice had failed. We have need of caution in the use of the last, as the blood in purpura does not coagulate. Especially should this be borne in mind should such a means be resorted to in hemorrhage from the bowels. We may in this last use astringents and even injections by the rectum. Cold affusions to the body, and washes of cold vinegar and of chlorides of lime to the eruption, may be safely employed.

Bloodletting has a place among the remedies of purpura. I have no experience to offer concerning it. The cases in which it has been thought to be indicated are strong and robust adults, where signs of inflammation are decidedly marked, and the hemorrhage of the disease slight. The objections in other cases are the additional exhaustion bloodletting produces, and the difficulty in checking the flow of blood from the arm.

A question may arise as to the propriety of the nosological place which this disease occupies. It ranks among diseases of the skin, and gets this place in systems of nosology—at least the species to which I have more particularly directed your attention—from one of the least important of its manifestations, viz. the eruption. It may in short be questioned if it be, in this species, an eruption at all. Its gravest symptoms are manifested in other situations, in a tissue which, let it be approximated anatomically as nearly to the cuticular as we please, is certainly but little more than a modification of that texture, I mean the mucous. But when we learn that the hemorrhage may and does take place in every texture of the body, the relations of the disease to the skin become still farther limited. I have no new name to offer for this disease, and there is much evil in changing names. I have alluded to the subject, however, in order to intimate that the affection of the skin is the least important sign of the disease, and to show that we are to use it principally if not only as a guide to the other organic modifications—to borrow a term from modern French pathology—rather than as claiming any particular regard in the treatment of the malady of which it forms so unimportant a part.

BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, JULY 24, 1833.

MODERN IMPROVEMENTS IN PRACTICAL ANALYSIS.

In a lecture on forensic medicine recently delivered by Dr. Cumin, at one of the medical schools in London, the progress which has been made in the chemical department of this science within a few years is exemplified in the instance of arsenic; and the following facts stated by the professor in this connection may not be uninteresting to our readers. From documents dated about the year 1774 we learn that it was then the practice to decide, as to the existence or non-existence of arsenic in the contents of the stomach, simply by the odor of the dry residuum when burnt. It was even said by a respectable author of that period, that in the event of other means failing, good evidence might be procured by burning the whole body, and observing the smell which arose from it. With this we may place in strong contrast the achievements of the present century. Hahnemann, an eminent authority on the subject of arsenic, on which he wrote about thirty years since, the same author in fact who has since distinguished himself as the founder of homoeopathic medicine, was supposed to have performed a great feat, by operating on ten grains in

the way of reduction. Hahnemann's process was to take a quantity of the white powder, the poisonous substance, and to sublime it in a retort. Dr. Black, the eminent chemist of Edinburgh, greatly improved upon this; and by employing a small glass tube, which he coated with clay and heated in a chafing dish, was enabled to operate on a single grain. But mark the recent rapid progress that has been made. Dr. Christison, a few years ago, surprised the toxicologists of the day, by showing that he could detect the one sixteenth part of a grain by reduction; and, more lately, how so minute a quantity as the one hundredth part of a grain might be subjected to the same test. Next we have it on the authority of Dr. Christison himself, that the one hundred and ninetieth part of a grain is more than sufficient to yield a good crust of the metal. 'I find, however,' adds Dr. C., 'that we may probably not have to stop even here. If the recent experiments of Professor Davy, of Dublin, be borne out, we shall have ample means of identifying the poison, even though it do not exceed the twenty-five hundredth part of a grain in weight—and that by an ingenious and very simple contrivance of the galvanic circuits.'

The delicacy which modern chemists have succeeded in attaining in the art of analysis, is indeed surprising, and its application to questions of medical jurisprudence has been one of the most important means of improving this science. The distance of time, too, after exhumation, at which legal investigation of a body may be made with success in determining the question of poisoning, is another of those facts which would have filled the chemists of the last century with astonishment. We are even furnished, by the wonderful perseverance which Orfila has lately displayed in pursuing this subject, with exact means of judging what changes a body should have undergone at different periods after exhumation under the ordinary causes of decay, so as to be able in some degree to judge whether in a given instance these causes alone have operated, or whether other circumstances have been superadded to procure the phenomena presented. The increase of facilities for detecting and exposing guilt, which have been thus placed within our reach, furnish the best evidence of the value of the science, and form the best eulogy of those illustrious individuals who have so ardently devoted themselves to its improvement.

SULPHUR BATHS.

Few physicians in this country are familiar with these baths. Few are apprised of their great power over a large number of diseases, or the great certainty with which they remove many that have resisted long every other conceivable mode of treatment. In many diseases of the skin, these baths act with surprising rapidity; and in all such as are attended with itching, the relief they afford is immediate and permanent. A long list of cases might be adduced, that have come under our own immediate

observation, having ourselves applied the bath in a vast variety of complaints. Such a list, however, would amount to little more than a repetition of that now before the profession, in the excellent work of Sir Arthur Clarke on Diseases of the Skin; in which he gives the details of several cases of scurvy, leprosy, tetters, ringworms, scabies, psoriasis, and other diseases of the surface, which yielded to the judicious application of this potent remedy. We say *judicious*, since, like all other applications that exercise considerable power over the living system, it is capable of doing much injury if entrusted to unskilful or inexperienced hands.

But the appropriateness of the sulphur bath is not confined to affections of the cutaneous texture. In rheumatism, and particularly chronic cases that have been unaffected by the usual courses of management, this bath affords great relief, and proves generally curative. A case has recently come to our knowledge, in which a gentleman from the country, who was much deformed by this disease, came to this city and spent a few weeks for the express purpose of taking the benefit of sulphureous fumigation. The success of the remedy was extremely gratifying, in his case; he returned home, entirely free from both disease and deformity.

There are still other forms of disease in which this bath has exhibited its power; and among them we may mention that affection of the face, commonly called *ringworm*, which has recently prevailed among us to a considerable extent. But our object is not now to discuss this subject, but merely to ask the attention of practitioners to a remedy that is used so little in proportion to its merits. Excepting our own bath, we know of but one or two in this city; and in the country we fear there is scarcely an establishment of the kind to be found. They ought surely to be much more numerous.

THE LUNATIC ASYLUM AT WORCESTER.

This institution, a monument at once of the liberality of the State and the enlightened philanthropy of the age, is already extending its comforts to the pitiable class of persons for whose benefit it was established, to the full extent of its capability. We are not usually aware of the great amount among us of any particular species of misfortune or suffering, until we collect the unfortunate sufferers into a single group. Then it is we are impressed with the necessity of our charity, and too often, as in the present instance, of its inadequacy to the wants of the community. It is to be hoped that the same benevolence and liberality that founded and endowed this institution will extend its dimensions, till all are accommodated who may have a claim on the public for such an asylum. Associations for extending a helping hand to the poor, whilst in the possession of their natural intellect and bodily health, are, in the opinion of many, of doubtful expediency or usefulness; but no diversity

of opinion can exist on the obligation of every christian community to protect him whose reason has deserted him, and to secure the comforts of a home to those among the poor whose power of earning their bread is under the pressure of sickness and pain.

Crystals on the Surface of the Colon.—Dr. Ehrmann, of Strasbourg, met with the following case lately in his clinical practice. A man, 54 years of age, of lymphatic temperament, entered the hospital, after having been ill during six or seven months: he was weak, emaciated, and with the aspect of laboring under disease of long standing, which was suspected to be cancerous. There was a tumor near the anus as large as the fist, hard and irregular. He had vomiting, obstinate constipation, &c. and at length died exhausted, and in the last degree of extenuation. The descending colon was found to be in a state of cancerous degeneration, which had produced constriction of the bowel. Above the part the intestine was much dilated, and the walls lined with a black substance, brilliant, and with crystals visible to the eye. These crystals were hexagonal, transparent, and insoluble in water. They were subjected to chemical analysis by Dr. Tauffeis, who gives the following details. They were not altered by a red heat; they dissolved without effervescence in muriatic acid; the oxalate of ammonia threw down a copious precipitate of oxalate of lime; and ammonia gave rise to a white precipitate, having all the characters of phosphate of lime.—*Gazette Médicale*.

Tincture of Roses.—Take the leaves of the common rose, place them, without pressing them, in a bottle, pour some good spirits of wine upon them, close the bottle, and let it stand until it is required for use. This tincture will keep for years, and yield a perfume little inferior to otto of roses. A few drops of it will suffice to impregnate the atmosphere of a room with a delicious odor.—Common vinegar is greatly improved by a very small quantity being added to it.

Treatment of Boils.—Professor Graves has found a combination of tonics and alkalis the most effectual remedy in cases of repeated crops of boils which occur in broken constitutions, and running through a process of imperfect suppuration, producing much irritation, loss of rest, and hectic symptoms.—*London Med. and Surg. Journ.*

Enlarged Spleen.—Dr. Percival has derived much benefit in enlarged spleen from a combination of gentian and iron.—*Ibid.*

Whole number of deaths in Boston for the week ending July 20, 27. Males, 11—Females, 16. Of dysentery, 1—inflammation on the brain, 1—old age, 4—consumption, 5—hooping cough, 1—fever, 1—dropsy, 1—scarlet fever, 1—intemperance, 1—dropsy on the brain, 3—acrolula, 1—tumor, 1—unknown, 1—drowned, 1—croup, 1—suicide, 1—cholera infantum, 1. Stillborn, 1.

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